

REMARKS

Claims 1-31, 33-68, and 70-74 are presently in this application.

Claims 32 and 69 have been canceled.

Claims 37 and 74 have been amended to incorporate the limitations from prior claims 32 and 69.

Claim 38 has been amended to correct minor grammatical errors.

Allowance of Claims 1-31, 33-68, and 70-74 is respectfully requested for the reasons set out below.

The examiner indicated that claims 37 and 74 would be allowable if the limitations from the parent claims were incorporated into these claims. Claims 37 and 74 are now independent claims and they incorporate all the limitations of their former parent claims 32 and 69. Claims 37 and 74 are thus allowable.

It is noted that claims 33, 34, 35 and 36 are now dependent on claim 37 and hence should be allowable for the same reasons that claim 37 is allowable.

It is noted that claims 70, 71, 72 and 73 are now dependent upon claim 74 and hence these claims should be allowable for the same reason that claim 74 is allowable.

The claims that were rejected in various paragraphs of the Office Action dated July 27, 2005 are listed below.

Paragraph 3: claims 1-6, 10-11, 17, 20, 22 and 28-31

Paragraph 4: claims 7-9

Paragraph 5: claims 12-16 and 23-27

Paragraph 6: claims 18-19, 21, 32-36, 38-43, 47-48 and 55-73

Paragraph 7: claims 44-46

Paragraph 8: claims 49, 51 and 53

Paragraph 9: claims 37 and 74 (These claims were indicated as allowable if they incorporated the limitations of the parent claims. This has been done, hence these claims are now allowable.)

Each of the above rejections (other than that the rejection in Paragraph 9) will be discussed below.

The following is with respect to the rejection in Paragraph 3 of the Office

Action: Claims 1-6, 10-11, 17, 20, 22, and 28-31 are rejected under 35 U.S.C. § 103(a) as being obvious over Auerbach Session Manager in view of Osman. Applicants respectfully traverse this rejection as neither reference alone nor the combination of these references teaches all of the elements recited in the these claims.

Claim 1 recites:

*"A method of controlling packet-switched calls, comprising the steps of:
...
communicating ... the signaling content of the call signaling connections from
the signaling gateway to a primary media gateway controller;"*

In the Office Action the Examiner indicates that the session manager in Auerbach (citing page 3, section 1.1, lines 13-16 of Auerbach) teaches the above limitation.

The cited lines in Auerbach state:

"Path – A path consist of one or more channels. A path is defined by protocol family, variant and other relevant characteristics specific to the protocol supported by that path. A path will use a session"

In an earlier section of the reference a session is defined as:

"A session is defined by a local IP address and port and a remote IP address and port. It is a 'physical' connection between a MGC and a gateway"

Thus, the cited section in Auerbach at most shows a signaling path between a media gateway controller (MGC) and a gateway. The cited section in Auerbach does not show "communicating the signaling content of a call signaling connections" to a media gateway controller.

Claim 1 further recites:

"routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the media gateway controller."

In the Office Action the Examiner states that Auerbach Session Manager discloses the above limitation, citing page 3, section 1.1, lines 13-16 which are quoted above. The cited section of Auerbach fails to show routing a plurality of packet-switched bearer streams to a media endpoint. What Auerbach shows is merely a "physical connection" (the words used by Auerbach) between a media gateway controller and a signaling gateway. Auerbach does not teach routing a plurality of packet-switched bearer streams, each corresponding to a packet-switched calls, to a media endpoint controlled by the media gateway controller as recited in applicants claim.

Claim 1 also recites:

"terminating a plurality of call signaling connections ... at a packet-switched signaling gateway, where each call signaling connection is packet-switched;"

Examiner states that Osman discloses the above recited limitation, citing reference step 304 in Figure 12A, and col. 12, lines 30-33. However, in Figure 12A, step 304, Osman shows a packet-switched connection originating at the signaling gateway and terminating at a media gateway controller. This is different than terminating a packet-switched connection at a signaling gateway as recited in claim 1. The relevant passages from col. 12, lines 30-33 of Osman further confirm that in Osman, a packet-switched connection originates at the signaling gateway and terminates at the MGC.

Independent claims 20 and 30 recite limitations that are similar to those discussed above. The above discussion thus also applies to claims 20 and 30. In conclusion, neither of the references alone, nor the combination of these references, anticipates claims 1, 20, 30, and the claims dependent on claims 1, 20 and 30.

The following is with respect to the rejection in Paragraph 4 of the Office

Action: Claims 7-9 are rejected under 35 U.S.C. § 103(a) as being obvious over Auerbach Session Manager in view of Osman, and further in view of Chrítie. Applicants respectfully traverse this rejection based upon the following two reasons. **First**, claims 7-9 are dependent upon claim 1 and are allowable for the same reasons as discussed above relative to claim 1. **Second**, the additional reference cited by the examiner does not teach the added features recited in these claims.

Claim 7 depends directly from claim 1 and further recites the limitation that "*the media endpoint is a media proxy*".

Examiner states that Chrítie discloses a media proxy, citing reference 150 in Figure 1, and col. 4, lines 53. However, Figure 1 of Chrítie fails to show routing of the packet-switched bearer streams to a media proxy. More importantly, Chrítie does not disclose that the media proxy is "controlled by a media gateway controller" as required by claim 7. (Note, claim 1 recites that the medial endpoint is controlled by the media gateway controller and claim 7 specifies that the end point is a medial proxy.)

Claims 8 and 9 have limitations similar to those described above, and the above discussion also applies to claims 8 and 9. In conclusion, none of the references alone or the combination of these references anticipates claim 7, and the corresponding dependent claims 8-9.

The following is with respect to the rejection in Paragraph 5 of the Office

Action: Claims 12-16 and 23-27 are rejected under 35 U.S.C. 103(a) as being obvious over Auerbach Session Manager in view of Osman, and further in view of Auerbach Signaling Backhaul Protocol. Applicants respectfully traverse this rejection based upon the following two reasons. **First**, claims 12-16 and 23-27 are dependent upon claims 1 and 20 and these dependent claims are allowable for the same reasons as discussed above relative to claims 1 and 20. **Second**, the additional reference cited by the examiner does not teach, the added features recited in these claims.

Claim 12 recites:

"multiplexing, at the media gateway controller, outbound signaling content destined for the packet-switched call signaling connections terminated by the signaling gateway, onto a smaller plurality of sessions with the signaling gateway;"

Examiner states that Auerbach Session Manager together with Osman disclose the above recited limitation, citing Auerbach Session Manager, page 3, lines 13-15, and Osman col. 12, lines 33-37. However neither reference nor the combination of them discloses multiplexing at the media gateway the signaling content of a plurality of signaling connections onto a smaller plurality of sessions.

In the Office Action the Examiner states that Auerbach Signaling Backhaul Protocol discloses using the native transport protocol appropriate to that signaling connection to transmit each protocol data unit over its associated call-signaling connection. But Auerbach Signaling Backhaul Protocol discloses a backhaul signaling protocol to transmit protocol data units between a media gateway controller and a signaling gateway. Auerbach Signaling Backhaul Protocol does not disclose using the native transport protocol appropriate to that signaling connection to transmit each protocol data unit over its associated call-signaling connection, where an associated call signaling connection is not necessarily formed between a signaling gateway and media gateway controller. (See Figure 5.) With respect to the additional references, there is no suggestion in Auerbach Signaling Backhaul Protocol to combine with the remaining cited references.

Claims 14 and 15 are dependent on claim 12 and they are patentable for the same reason as discussed above relative to claim 12. Claims 23-27 have similar limitations to those in claims 12-16 and those in the above discussion applies to these claims. In summary, none of the cited references or the combination of these references discloses all of the limitations recited in claims 12-16 and 23-27.

The following is with respect to the rejection in Paragraph 6 of the Office

Action: Claims 18-19, 21, 32-36, 38-43, 47-48 and 55-73 are rejected as being obvious over Auerbach Session Manager in view of Osman, and further in view of ITU-H.323. Applicants respectfully traverse the Examiner's rejections for the following reasons.

Claims 33, 34, 35 and 36 are now dependent upon claim 37. The Examiner previously indicated that claim 37 would be allowable if it incorporated the limitations of its parent claim. Claim 37 has been amended to incorporate therein the limitations of its parent claim hence claim 37 is allowable. Applicants submit that claims 33, 34, 35 and 36 which are dependent on claim 37 are allowable for the same reasons that claim 37 is allowable.

Claims 70, 71, 72 and 73 are now dependent upon claim 74. The Examiner previously indicated that claim 74 would be allowable if it incorporated the limitations of its parent claim. Claim 74 has been amended to incorporate therein the limitations of its parent claim hence claim 74 is allowable. Applicants submit that claims 70, 71, 72 and 73 which are dependent on claim 74 are allowable for the same reasons that claim 74 is allowable.

The other claims that are subject to the above rejection are dependent upon independent claims that are patentable for the reasons explained above. Thus applicant submits that the above listed dependent claims are patentable for the same reason that their parent claims are patentable.

It is also noted that the claims listed above include other limitations not shown or suggested in the references. For example, claim 19 is dependent upon claim 18 which in turn is dependent upon claim 1. Claim 1 is allowable for the reasons explained above. Claim 19 is therefore allowable for the same reasons as disclosed above relative to its parent claims. Furthermore, claim 19 recites the further limitation that:

"routing a packet-switched video stream associated with the audio stream to the media endpoint controlled by the media gateway controller."

None of the references make even a vague suggestion to "routing a packet-switched video stream associated with the audio stream to the media endpoint controlled by the media gateway controller." Therefore in addition to being patentable for the same reason as its parent claim, claim 19 is patentable based upon the specific limitation recited above.

With respect to the reference referred to as the "Draft H.323" which was cited by the Examiner: Draft H.323 is a document that describes a general protocol.

As explained in the applicants' specification, applicants' invention solves some capacity problems encountered by systems utilizing the H.323 protocol. The problems solved by the present invention are explained on page 4 of the specification as follows:

"although a media gateway controller may have the internal capability to control hundreds of thousands or even millions of calls simultaneously, it may be able to handle only a few thousand H.323 calls. This is because each H.323 call requires up to two TCP signaling connections, such that H.323 calls consume the available TCP connections on a typical gateway controller platform long before the controller's internal call processing limitations are reached. (Even in the limit, TCP only allows 65,535 connections due to the use of a 16-bit port address field.) Second, dropped TCP signaling packets from some H.323 calls may block the transmission of a large number of signaling packets from other H.323 calls, creating undesirable signaling delay conditions. And third, TCP provides no failover mechanism, resulting in an H.323 call being dropped if one of its TCP signaling connections is broken. This situation is particularly troublesome when a media gateway controller handling a large number of H.323 calls drops all of its TCP connections, resulting in all of the H.323 calls and the media streams associated with them being dropped."

As to the combination of the "Draft H.323" document with the other references cited by the Examiner, the Examiner states (on page 12 of the Office Action):

"One skilled in the art would have recognized where each call signaling connection is packet-switched, and would have applied Osman et al's signaling gateway in the IP carrier network in Auerbach et al's session."

First there is absolutely no basis in the references for making this combination of references. Second, there is no showing that such a combination of references would have resulted in the specific combination of elements recited in applicants' claims.

For the above reasons applicants request reconsideration and withdrawal of the rejection of claims 18-19, 21, 32-36, 38-43, 47-48, and 55-73 based on "Auerbach Session Manager in view of Osman, and further in view of ITU-H.323."

The following is with respect to the rejection in Paragraph 7 of the Office

Action: Claims 44-46 are rejected as being obvious over Auerbach Session Manager, in view of Osman, and in view of ITU-H.323, and further in view of Chritie. Applicants respectfully traverse the Examiner's rejections for the following reasons.

Claims 44-46 are dependent upon claim 38 and applicants submit that these claims are patentable for the same reasons as discussed above relative to claim 38.

The following is with respect to the rejection in Paragraph 8 of the Office

Action: Claims 49, 51 and 53 are rejected as being obvious over Auerbach Session Manager, in view of Osman, in view of ITU-H.323, and further in view of Auerbach Signaling Backhaul Protocol. Applicants respectfully traverse the Examiner's rejections for the following reasons.

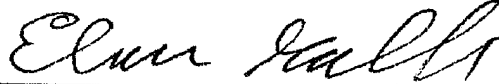
Claims 49, 51, and 53 are dependent on claim 38. Applicant submits that these claims are patentable for the same reason as discussed above relative to claim 38.

CONCLUSION

For the foregoing reasons, reconsideration and allowance of claims Claims 1-31, 33-68, and 70-74 as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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